

**Appl. No.** : **09/942,983**  
**Filed** : **August 30, 2001**

### **AMENDMENTS TO THE CLAIMS**

1-157. (Canceled)

158. (New) A system for determining prepayment scores representative of prepayment propensity of borrowers for loans, comprising:

a communications server connected via a network to a plurality of loan terminals configured to accept and transmit loan application, wherein the communications server is configured to receive transmitted loan applications;

an application parser electronically connected to the communications server and configured to receive the transmitted loan applications from the communications server and to parse the loan applications into at least loan information and applicant information;

a prepayment model library database comprising loan prepayment models electronically connected to the application parser and configured to receive the loan information, to fit the loan information into at least one loan prepayment model, and to transmit at least one loan prepayment model that matches the loan information; and

a prepayment calculation server comprising a prepayment score generation model electronically connected to the prepayment model library database and configured to receive the loan prepayment model and to calculate prepayment scores for each loan application based at least in part upon the loan prepayment model and the prepayment score generation model, wherein the prepayment calculation server is further adapted to transmit the prepayment scores to any one of the plurality of loan terminals via the network;

wherein the prepayment score is calculated from the formula:

$$Score = \sum_T TP(T)$$

where T represents time and P represents prepayment; and

wherein the plurality of loan terminals are adapted to use the prepayment scores to adjust loan terms.

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159. (New) The system of Claim 158, wherein the prepayment model library database further comprises:

a model training server configured to create the loan prepayment models for the prepayment model library database; and

prepayment historical data connected to the model training server, the prepayment historical data further comprises prepayment statistics regarding loans of various types.

160. (New) The system of claim 158, wherein the prepayment calculation server further comprises an econometric model that generates Low Discrepancy Sequence (LDS)-based scenarios of econometric parameters for input to the prepayment calculation server.

161. (New) The system of Claim 158, wherein total prepayment at time T is calculated from the formula:

$$P(T) = (1/S) \sum_{s=1}^S P_s(T)$$

where S represents the number of scenarios and P represents the prepayment amount for a given scenario.

162. (New) The system of Claim 161, wherein the total prepayment, accumulated by time, in scenario s is calculated from the formula:

$$P_s(T) = \prod_i p_s(t_i)$$

where p(t) is a prepayment value.

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163. (New) A system for determining a prepayment score representative of a propensity of a consumer to prepay a loan, comprising:

at least one computer comprising computer hardware including at least one computer processor in communication with at least one computer-readable medium storing a plurality of sets of computer-executable instructions and a prepayment model library database comprising data defining a plurality of prepayment models, wherein each prepayment model defines a formula to calculate a prepayment score as a function of at least time and prepayment propensity and wherein the computer hardware is configured to execute the computer-executable instructions;

a first set of computer-executable instructions comprising instructions configured to cause the computer to parse a loan application that has been received into at least loan information and applicant information;

a second set of computer-executable instructions comprising instructions configured to cause the computer to select, from the prepayment model library database, a loan prepayment model for calculating a loan prepayment score;

a third set of computer-executable instructions comprising instructions configured to cause the computer to receive the selected loan prepayment model and to calculate a prepayment score for the loan application based at least in part upon the selected loan prepayment model; and

a fourth set of computer-executable instructions comprising instructions configured to cause the computer to transmit the calculated prepayment score to a loan terminal adapted to adjust terms of a loan.

164. (New) The system of Claim 163, wherein the prepayment model library database is in communication with a model training server for creating the loan prepayment models for the prepayment model library database and prepayment historical data comprising prepayment statistics regarding loans of a plurality of types.

165. (New) The system of Claim 163, wherein the third set of computer-executable instructions is configured to receive as input at least one Low Discrepancy Sequence-based scenario of econometric parameters generated using an econometric model.

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166. (New) The system of Claim 163, wherein calculating total prepayment at a particular time comprises calculating a prepayment amount for each of a plurality of scenarios and total prepayment is a function of at least the number of scenarios and the prepayment amounts.

167. (New) The system of Claim 166, wherein total prepayment is the average prepayment amount of the plurality of scenarios.